

## Product datasheet for **RC234220**

### **B4GALNT1 (NM\_001276468) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	B4GALNT1 (NM_001276468) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	B4GALNT1
Synonyms:	GALGT; GalNAc-T; GALNACT; SPG26
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC234220 representing NM\_001276468  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTGGCTGGCCCGCGGCCCTGTGCGCTCTGGTCTTCTGCTCGCCTGCGCCTCGCTGGGGCTCCTGT  
 ACGCGAGCACCCGGGACGCGCCCGCCTCCGGCTACCTCTTGCCTGGGCGCCCGCAAAGCCCCG  
 CAGGCCGAGCTGCCAGATCTTGCTCCTGAGCCCCGCTACGCACACATCCCGGTACAGATCAAGGAGCAA  
 GTAGTGGGAGCCAGTCCCCAGCTGACCAGCTGCTCATAGCCCCTGCCAACTCCCCGCTCCAGTACCCCC  
 TACAGGGTGTGGAAGTTCAGCCCCTCAGGAGCATCTTGGTGCCAGGGCTGAGCCTTACAGCAGCTTCTGG  
 TCAGGAGGTATACCAGGTGAACCTGACTGCCTCCCTAGGCACCTGGGACGTGGCAGGGGAAGTACTGGA  
 GTTACTCTCACTGGAGAGGGTACGGCAGATCTCACCTTGTACGCCAGGGCTGGACCAACTCAACAGGC  
 AACTACAACCTGGTCACTTACAGCAGCCGAAGCTACCAGACCAACACAGCAGACACAGTCCGGTTCTCCAC  
 CGAGGGACATGAGGCTGCTTTCATATCCGCATAAGACACCCGCCAACCTCGGCTGTACCCACCTGGG  
 TCTCTACCCAGGGAGCCAGTACAACATCAGCGCTCTAGTACGATTGCCACCAAGACCTTCTCCGTT  
 ATGATCGGCTACGGGCTCTCATACCAAGTATCCGCGCTTCTACCCAACGGTTACCGTGGTCATCGCTGA  
 CGACAGCGACAAGCCAGAGCGGTTAGTGGCCCTACGTGGAACACTATCTCATGCCCTTCGGCAAGGGC  
 TGGTTCGAGGCCGGAACCTGGCCGTGTCTCAAGTAACCAACAGTACGTGCTGTGGGTGGACGACGACT  
 TCGTCTTACGGCGCGGACGCGGCTGGAGAGGCTTGTGGACGTGCTGGAGCGGACGCCGCTGGACCTGGT  
 GGGGGCGCGGTGCGCGAGATCTCCGGCTTTCACCACCTTATCGGCAGCTGCTGAGCGTGGAGCCCCGC  
 GCCCAGGCCTCGGAACTGCCTCCGGCAAAGGCGCGGCTTCCACCACGAGCTCGTCGGCTTCCCAGGCT  
 GCGTGGTCAACGACGGCGTGGTTAACTTCTTCTGGCGGACTGACAAGGTGCGCGAGGTCGGTTCGCA  
 CCCCCGCTCAGCCGCGTGGCTCATCTGGAATTCTTCTGGATGGGCTTGGTTCCCTTCGGGTTGGCTCC  
 TGCTCCGACGTCGTGGTGGATCATGCATCCAACTGAAGCTGCCTTGGACATCAAGGGATGCCGGAGCAG  
 AGACTTACGCCCGGTACCGTTACCCAGGATCACTGGACGAGAGCCAGATGGCCAAACACCGGCTGCTCTT  
 CTTCAAACACCGGCTGCAGTGCATGACCTCCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC234220 representing NM\_001276468  
 Red=Cloning site Green=Tags(s)

MWLGRRALCALVLLACASLGLLYASTRDAPGLRLPLAPWAPPQSPRRPELPDLAPEPRYAHIPVRIKEQ  
 VVGSQSPADQLLIAPANSPLQYPLQGVVQPLRSILVPGLSLQAASGQEVYQVNLTASLGTWDVAGEVTG  
 VLTGEGQADLTLVSPGLDQLNRQLQLVTYSSRSYQNTADTVRFSTEGHEAAFTIRIRHPPNPRLYPPG  
 SLPQGAQYNISALVTIATKFLRYDRLRALITSIRRFYPTVTVVIADDSKPERVSGPYVEHYLMPFGKG  
 WFAGRNLAVSQVTTKYVLWDDDFVFTARTRLERLVDLERTPLDLVGGAVREISGFATTYRQLLSVEPG  
 APGLGNCLRQRRGFHHEL VGFPVCVTDGVVNFFLARTDKVREVGFDPRLSRVAHLEFFLDGLGSLRVGS  
 CSDVVVDHASKLKLPTWSRDAGAETYARYRYPGSLDESQMAKHRLLLFFKHRLQCMTSQ

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001276468

**ORF Size:** 1434 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_001276468.2](#)
**RefSeq Size:** 2428 bp

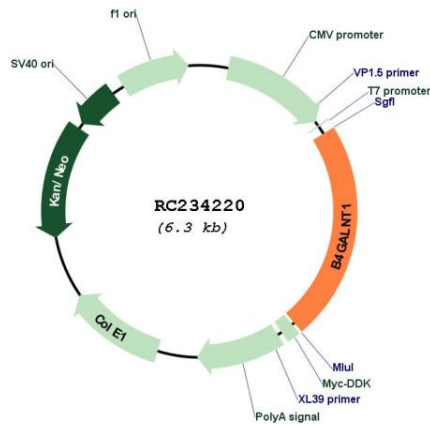
**RefSeq ORF:** 1437 bp

**Locus ID:** 2583

**UniProt ID:** [Q00973](#)

<b>Cytogenetics:</b>	12q13.3
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Glycosphingolipid biosynthesis - ganglio series, Metabolic pathways
<b>MW:</b>	53.3 kDa
<b>Gene Summary:</b>	GM2 and GD2 gangliosides are sialic acid-containing glycosphingolipids. GalNAc-T is the enzyme involved in the biosynthesis of G(M2) and G(D2) glycosphingolipids. GalNAc-T catalyzes the transfer of GalNAc into G(M3) and G(D3) by a beta-1,4 linkage, resulting in the synthesis of G(M2) and G(D2), respectively. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2013]

**Product images:**



Circular map for RC234220